STATEMENT OF POLICY

Notifiable Disease Reporting

Policy

The National Association of County and City Health Officials (NACCHO) supports continued evaluation and quality improvement efforts by the Centers for Disease Control and Prevention (CDC) in collaboration with state, tribal, local, and territorial (STLT) health departments, to improve nationally notifiable disease reporting and surveillance. The key outcomes of these efforts should be strategies that address identified gaps that staff trained in surveillance at STLT health departments can implement to improve notifiable disease reporting processes. NACCHO urges the convening of a panel of stakeholders, including healthcare providers and state, tribal, local, territorial, and federal surveillance practitioners to develop a strategic vision for nationally notifiable disease surveillance and ensure that the National Notifiable Disease Surveillance System (NNDSS) is supported by the most current technologies and skilled workforce. Increased federal funding will be necessary to support these continuous quality improvement efforts.

Increased resources should support a review of and improvements to the capacities, operations, and processes of current notifiable disease reporting and surveillance systems to assure that the current systems support the mandates and missions of STLT health departments. The impact of the COVID-19 pandemic has highlighted the importance of prompt disease reporting and advancements in surveillance systems. Without additional sustained resource investments, these systems become obsolete burdens on public health agencies and can lead to the mistrust of public health. Such a review and support for action should do the following:

- Describe the rationale for the information required and recommended to be collected;
- Describe the current reporting processes, systems used, and their rationale for all settings (including at-home tests, school testing, etc.) to streamline the reporting system;
- Describe the current surveillance processes, systems used, and their rationale;
- Describe the characteristics of electronic systems that support efficient and effective reporting of nationally notifiable diseases;
- Describe the characteristics of electronic systems that support efficient and effective surveillance functions such as data collection and trend analysis;
- Describe best practices when implementing electronic data transmission;
- Identify the major challenges that interfere with efficient and effective reporting of nationally notifiable conditions (e.g., resource, technical, legal);
- Identify mechanisms, preferably built into routine reporting systems, enabling CDC and health departments to rapidly develop and exchange ad hoc data if needed in emergent

situations;
- Recommend and implement solutions to address these challenges;
- Define an acceptable timeframe for sharing data externally;
- Ensure there is adequate training at the state level for procedures on the local levels;
- Identify strategies to obtain local input for reporting mechanisms and feedback;
- Identify the gaps in reporting for laboratory and testing sites to improve these barriers;
- Identify necessary workforce skills required to conduct efficient and effective national notifiable disease surveillance; and
- Ensure sustained funding for necessary technologies and workforce.

Justification

A notifiable disease is one CDC and the Council for State and Territorial Epidemiologists have identified as a disease for which regular, frequent, and timely information regarding individual cases is considered necessary for the prevention and control of the disease.[1] Healthcare facilities, laboratories, nursing homes, and other entities must report such diseases, as mandated by federal, state, or local statute. Notifiable disease data are used for monitoring trends, program planning, evaluation, policy development, research, and assessing the effectiveness of prevention and control activities.[2] Notifiable disease surveillance data, including syndromic surveillance systems in identifying notifiable diseases and conditions also serve to protect the public's health by ensuring the proper identification and follow-up of cases,[1] which generally takes place at the local level and is necessary to employ recommended control measures as well as helping to improve health department distribution of limited resources for targeted investigations and interventions.[3] More transparent handling of STLT surveillance data within CDC and better data feedback loops are needed if STLT public health reporters are to work effectively with CDC staff to improve data quality.[1] This is particularly important with the complex National Notifiable Disease Surveillance System.

Elements of a high functioning notifiable disease reporting system include: mechanisms for sharing aggregated data with reporting entities (e.g., healthcare facilities, state departments) in a timely manner to allow for program evaluation and planning; standardization of rules and regulations for reporting notifiable diseases; advancement of electronic case reporting; provision of information to health practitioners and other reporting entities about the importance of timely and complete notifiable disease reporting; and mechanisms for sharing aggregate data with the public so that community members, researchers, and leaders can make informed decisions. These actions are particularly important during transitions from more traditional notifiable disease reporting to automated electronic surveillance systems.

In its current form, notifiable disease reporting completeness is highly variable, signaling a need to improve the system. Many current reporting processes rely on practitioner initiated, manual data entry and submission, which may result in incomplete data, inaccuracy, and delayed event notification.[4] This method of clinician-initiated passive surveillance is also burdensome to healthcare practitioners, which may result in increased reporting delays, incomplete data, and inaccuracies due to omissions and errors.[3,4] Electronic-laboratory reporting systems, which are based on laboratory test results, addresses many of these limitations. However, they often lack information needed for public health purposes (patient demographics, patient's presentation of symptoms, prescribed treatments, and pregnancy status) and cannot identify conditions defined

by clinical criteria (such as acute pelvic inflammatory disease); they also can be unrelated to an active disease (e.g., pre-employment immunization screening results for healthcare professionals).[3, 4] As such, these systems typically require additional follow up actions to be undertaken.

The variability in current notifiable disease reporting may be attributable to varying resources and priorities of state and local officials responsible for disease control and public health surveillance; differences in conditions deemed reportable; policies for reporting due to variations in state and jurisdiction laws and regulations; an expanding list of notifiable diseases; and new tools, such electronic health records, immunization registries, and social media, being developed and applied to surveillance functions.[1] These issues create significant barriers to efficient disease surveillance and effective disease-specific control measures.

Without more input from jurisdictions, CDC may not be well positioned to appreciate local surveillance workflow and system needs, which increases the challenges of coordinating and maintaining such a complex system.[1] Current influences affecting public health are increasing the complexity and challenges of surveillance. These influences include changing populations (multicultural/multilingual society), technological advances in both information exchange and laboratory diagnostics, the need for more rapid information by greater numbers of stakeholders, healthcare reform, which is making electronic information more available from clinical settings and other non-health care sources (e.g. social media, first responder electronic data), and tighter constraints on public funding. Consideration of surveillance workflow processes at the state and local levels is important for successful enterprise-system design (electronic system or systems).

There is currently no mechanism to enable CDC and state, local, and territorial health departments to rapidly institute national, standards-based data collection systems in response to national outbreaks. Rapidly developed ad hoc systems have proven cumbersome and have persisted long after outbreaks are over. There are currently no national standards for electronically sharing or transferring cases to another jurisdiction, including local to state surveillance system electronic transfer of information.[1] CDC's communications with STLT health departments regarding CDC's surveillance system planning are often limited, making communications feel incomplete or untimely. Improved CDC communications and a long-term commitment to stated plans would greatly aid state, local, and territorial planning.

All of these factors demand a larger, more technically trained, and proficient workforce at all levels of governmental public health. Thus, increased federal support for disease surveillance and improving the systems used for it, such as the National Notifiable Disease Surveillance System, are essential. Continual input from STLT stakeholders on the features and functions of the reporting system is essential to its utility.

References

1. Centers for Disease Control and Prevention (CDC). (October 23, 2015). Summary of Notifiable Infectious Diseases and Conditions—United States, 2013. *MMWR*. *62*(53): 1-119. Retrieved October 5, 2016, from https://www.cdc.gov/mmwr/preview/mmwrhtml/mm6253a1.htm.
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Record of Action
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